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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,131	06/25/2004	Richard C Madter	1679-52/JLW	7371

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EXAMINER	
TRUJILLO, JAMES K	
ART UNIT	**PAPER NUMBER**
2116	

MAIL DATE	DELIVERY MODE
09/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/500,131	MADTER ET AL.	
	Examiner	Art Unit	
	James K. Trujillo	2116	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 June 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-10 and 12-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-10 and 12-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/19/07 has been entered.

2. The office acknowledges the receipt of the following and placed of record in the file: Amendment dated 6/19/07.

3. Claims 1, 2, 4-10 and 12-20 are presented for examination.

Claim Objections

4. Claim 1 is objected to because of the following informalities: Regarding claim 1, on line 6, "reading a key value" should be changed to "reading the key value" in order to prevent indefiniteness. Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of Davis U.S. Patent 5,937,063.

7. Regarding claim 1, AAPA teaches a boot method for use in a mobile device having a FLASH memory storing content comprising boot instructions (External Memory (FLASH) 18, figure 1 of the instant application), an internal-read only memory storing boot program code (BootROM 14, figure 1 of the instant application), and having a serial port (serial port 12), execution of the boot program code stored in the read-only memory causing the mobile device to perform the steps of:

either polling the serial port for activity or jumping to the FLASH memory for execution of boot instructions stored therein (figure 2 of the instant application and paragraphs [0003]-[0006]).

AAPA does not explicitly disclose the FLASH memory storing a key value stored in security location, and internal read only memory storing a predetermined value:

reading the key value from a security location in the FLASH memory, the key valued being independent of the content of the FLASH memory;

comparing the key values to a predetermined security value stored in the internal read-only memory, the predetermined security value being independent of the content of the FLASH memory; and

depending on the result of the comparison of the key value to the predetermined value either polling the serial port for activity or jumping to the FLASH memory for execution of boot instructions stored therein.

Davis teaches a FLASH memory storing a key value (non-volatile memory 62 storing "shared secret" 64, figure 1) and content comprising boot instructions (BIOS program 63, figure 1) stored in security location (secure boot device 54, figure 1), and internal read only memory (non-volatile memory 65, figure 1) storing a predetermined value (Shared Secret 64, figure 1):

reading the key value from a security location in the FLASH memory, the key valued being independent of the content of the FLASH memory (shared secret 65 is only a key used by a boot device and a processor, therefore it is independent of the content of the FLASH memory, abstract and col. 2, lines 33-44);

comparing the key values to a predetermined security value stored in the internal read-only memory (using the key to decrypt the data, col. 2, lines 33-55 and figure 2), the predetermined security value being independent of the content of the FLASH memory (shared secret 65 is only a key used by a boot device and a processor, therefore it is independent of the content of the FLASH memory, abstract and col. 2, lines 33-44); and

depending on the result of the comparison of the key value to the predetermined value jumping to the FLASH memory for execution of boot instructions stored therein (12 and 14 of figure 2).

Davis further provides the advantage of preventing unauthorized replacement of a storage device containing boot code (col. 2, lines 3-17).

It would have been obvious to one of ordinary skill in the art having the teachings of AAPA and Davis before them at the time the invention was made to modify the FLASH memory and internal read-only memory of AAPA to include a key value as taught by Davis. In combining AAPA with Davis it would follow that depending on the result of the comparison of

the key value to the predetermined value, either polling the serial port for activity or jumping to the FLASH memory for execution of the boot instruction stored therein in order to download programs or execute the boot program.

One of ordinary skill in the art would have been motivated to make the modification in order to gain the advantage of preventing unauthorized replacement of the FLASH memory containing boot code.

8. Regarding claim 2, AAPA together with Davis taught the method according to claim 1, as described above. AAPA further teaches wherein polling is performed and therefore it would have been obvious to one of ordinary skill in the art having the teaching of AAPA and Davis before them at the time invention was made, to modify AAPA to perform polling if the key value does not match the predetermined security value so that the system may continue to download programs.

9. Regarding claim 4, AAPA together with Davis taught the method according to claim 2, as described above. AAPA further teaches further comprising the step of downloading code into internal SRAM located in the mobile device in response to a detection of serial port activity (paragraph [0005]).

10. Regarding claim 5, AAPA together with Davis taught the method according to claim 4, as described above. AAPA further teaches the step of executing an instruction in the downloaded code (paragraph [0005]).

11. Regarding claim 6, AAPA together with Davis taught the method according to claim 1, as described above. AAPA further teaches a BootROM located in the mobile device. Davis

teaches storing a predetermined value in a nonvolatile memory. As modified it would have been obvious to one of ordinary skill in the art to store the predetermined value in the BootROM of AAPA because it is accessible by the processor and is a nonvolatile memory. One of ordinary skill in art would have expected the predetermine value to work equally as well in the BootROM of AAPA with predictable results.

12. Regarding claim 7, AAPA together with Davis taught the method according to claim 1, as described above. AAPA further teaches wherein the step of reading is performed in response to a reset command (figure 3).

13. Regarding claims 8-10 and 12-20, they recite substantially similar limitations and are therefore rejected using the same rationale as set forth hereinabove.

Response to Arguments

14. Applicant's arguments with respect to claim 1, 2, 4-10 and 12-20 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James K. Trujillo whose telephone number is (571) 272-3677. The examiner can normally be reached on M-F (8:00 am - 5:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rehana Perveen can be reached on (571) 272-3676. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

James K. Trujillo
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